

- b) arranging a sleeve of a deformable material between said end parts; and
- c) radially expanding the end part of the second pipe towards the end part of the first pipe so as to bias the sleeve between said end parts
- wherein the first pipe is an upper wellbore casing secured in a formation and the second pipe is a lower wellbore casing.

8. (Amended) The method of claim 7, wherein said device comprises a cylindrical body provided with an annular shoulder for positioning the device against the end part of the second pipe, and arranging the explosive charge in an annular recess.

REMARKS

Claims 1-8 remain in the present application. Claims 1 stood as rejected under 35 U.S.C. §102(b) as anticipated by Gabor, (DE 3,407, 467), and claims 2-8 stand as rejected under 35 U.S.C. §103(a) over Gabor et al. in view of Kapgan et al. (US Patent 5,662,362). The above amendment further clarifies claim 1, and rewrites claim 8 to add a process step.

The present invention is a method to connect wellbore casing segments that includes radially expanding a second casing segment into the a first casing segment with a sleeve of a deformable material between the ends that are being joined.

The above amendment requires that the upper casing is secured in a formation. This differentiates the present casings from the pipes of Gabor. Claim 1 is rejected over Gabor et al. based on the casings not being structurally different than two pipes. The above amendment requires that the first casing segment is secured in a formation. There is no suggestion in Gabor that Gabor's first pipe be secured in a formation, and thus there is now clearly a structural difference between Gabor and the present invention. Further, there is no suggestion present in the references of record to use the connection method of the present invention to hang a lower casing from an upper casing. The use of the present invention to hang the lower casing from the upper casing solves many needs that have been long felt in the art. The present invention provides a tight seal between the casings without relying on cement to produce a seal. Further, this permits a constant inner diameter for the two strings of casing which is particularly advantageous for wellbore casings.

The objections and rejections having been traversed, allowance of the remaining claims is respectfully requested.

Respectfully submitted,

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enclosure: duplicate petition to extend time to respond
redlined copy of amended claim

Redline copy of amended claim 1
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1. 1. (Twice Amended) A method of connecting a first pipe to a second pipe having an end part fitting into an end part of the first pipe, comprising

- a) arranging the end part of the second pipe within the end part of the first pipe;
- b) arranging a sleeve of a deformable material between said end parts; and
- c) radially expanding the end part of the second pipe towards the end part of the first pipe so as to bias the sleeve between said end parts

wherein the first pipe is an upper wellbore casing secured in a formation and the second pipe is a lower wellbore casing.

8. (Amended) The method of claim 7, wherein said device comprises a cylindrical body provided with an annular shoulder for positioning the device against the end part of the second pipe, and arranging the explosive charge in an annular recess in which the explosive charge is arranged].